Safety Data Sheet

Section 1. Identification		
Product Identifier	**Sulphamic Acid**	**Version: 6** **Effective Date:** 25 January 2021
Other Means Of Identification	Amidosulfonic Acid	
Initial Supplier Identifier	Chemfax Products Ltd. 11444 – 42 Street SE Calgary, AB T2C 5C4 Tel: 403-287-2055	
Recommended Use and Restrictions On Use	Industrial acid, reactant, chemical intermediate, descaler. No restrictions.	
Product Family	Organic acids	
Emergency Phone	1-855-887-2055 Monday - Friday 8:00am - 4:30pm MST	

Section 2. Hazard Identification	
Hazard Classification	
Health Hazards	Skin Corrosion/Irritation – Category 2 Eye Damage/Irritation – Category 2A
Environmental Hazards	Hazardous To The Aquatic Environment – Short Term (Acute) Hazard – Category 3 Hazardous To The Aquatic Environment – Long Term (Chronic) Hazard – Category 3
Signal Word	Warning
Hazard Statement	Causes skin irritation. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.
Precautionary Prevention Statement	Wash hands thoroughly after handling. Wear protective gloves, eye and face protection. Avoid release to the environment.
Precautionary Response Statement	IF ON SKIN: Wash with plenty water. Specific Treatment: Treat symptomatically. Do not induce vomiting unless directed by medical personnel.

	If skin irritation occurs: Seek medical attention. Remove contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, seek medical attention.
Precautionary Storage Statement	No statement
Precautionary Disposal Statement	Dispose of contents/container in accordance with local regulations.
Other Hazards	None

Section 3. Composition / Information on Ingredients

Chemical Name	Common Name or Synonyms	CAS NO. and Other Unique Identifiers	% by weight
Sulphamic acid	Amidosulphonic acid	5329-14-6	99

Section 4. First-Aid Measures

Eye Contact	Flush eyes with water for 15 minutes. Seek medical attention.
Skin Contact	Flush area with water. If irritation persists, seek medical attention. Launder clothing before reuse.
Inhalation	Remove victim to fresh air. If there is difficulty breathing, seek immediate medical attention.
Ingestion	Remove victim to fresh air. If there is difficulty breathing, seek immediate medical attention.
Most Important Symptoms and Effects Both Acute and Delayed	Irritation, headache, shortness of breath, and nausea.
Immediate Medical Attention and Special Treatment	No specific treatment. Treat symptomatically.

Section 5. Fire-Fighting Measures

Suitable and Unsuitable Extinguishing Media	Dry chemical, CO_2, alcohol foam, or water spray.
Hazardous Combustion Products	Oxides of nitrogen, oxides of sulphur, oxides of carbon, and ammonia.

Specific Hazards Arising From the Product	Thermal degradation may produce toxic gases and mist, such as sulphur oxides and nitrogen oxides.
Special Protective Equipment and Precautions For Fire-Fighters	Fire-fighters should wear self-contained breathing apparatus and full protective clothing. Use water spray to cool containers and structures exposed to fire.

Section 6. Accidental Release Measures	
Personal Precautions, Protective Equipment and Emergency Procedures	Chemical resistant gloves (neoprene), coveralls (rubber) and boots rubber. Isolate area and evacuate unnecessary personnel. Ensure adequate ventilation.
Environmental Precautions	Do not allow to enter the storm water systems or surface drains. Dike and contain.
Methods and Materials For Containment and Clean-Up	Sweep up spilled product without generating dust. Place in a suitable container for disposal. Neutralize with lime slurry or soda ash. Flush area with water to remove residues.

Section 7. Handling and Storage	
Precautions For Safe Handling	Handle with care. Corrosive in contact with moisture.
Conditions For Safe Storage	Store in a cool dry place. Keep containers closed when not in use. Protect against water, moisture, and physical damage. Avoid incompatible materials.

Section 8. Exposure Controls / Personal Protection	
Control Parameters Sulphamic acid	**TWA: 8 Hr STEL: 15 min Ceiling IDLH *** No information available * Immediately Dangerous to Life and Health
Exposure Controls	Local exhaust ventilation
Appropriate Engineering Controls	Provide exhaust ventilation to keep the airborne concentration below the applicable workplace exposure limits. Ensure safety shower and eyewash station are available.
Individual Protective Measures **Eye / Face Protection**	For dusty or misty conditions: Safety glasses.
Skin Protection	Chemical resistant coveralls, gloves
Respiratory Protection	NIOSH approved respirator

Section 9. Physical and Chemical Properties	
Appearance	White crystals
Odour	No odour
Odour Threshold	Not available.
pH	1.18
Flash Point	Not applicable
Boiling Point and Boiling Range	Decomposes at 209 °C
Melting Point and Freezing Point	205 °C
Evaporation Rate	Not applicable
Flammability (solid, gas)	Not flammable
Upper and Lower Flammability or Explosive Limits	No data
Vapour Pressure	Not applicable
Vapour Density	Not applicable
Relative Density	2.125
Solubility	14.7 % @ 0 °C
Partition co-efficient, n-Octanol/Water	No data
Auto-ignition Temperature	No data
Decomposition Temperature	209 °C
Viscosity	Not applicable

Section 10. Stability and Reactivity	
Reactivity	Stable
Chemical Stability	Stable when dry, but hydrolyses in solution. Sulphamic acid decomposes at 208 °C. At room temperature, dilute solutions are stable for many months. At higher temperatures and with stronger solutions, hydrolysis of the acid and its ammonium salts occurs, forming ammonium hydrogen sulphate and ammonium sulphate. This reaction occurs much more rapidly as the pH lowers.
Possibility of Hazardous Reactions	Will not occur
Conditions to Avoid	Avoid dispersions of sulphamic acid particulates into air and contact with heat. Avoid the use of non vented containers if concentrated solutions of the acid are made and heated, as a runaway hydrolysis reaction will occur, generating sufficient steam to cause an explosion.
Incompatible Materials	Chlorine, potassium chlorate, nitric acid, metal sulphides, nitrates, nitrites, strong bases, bromine, and strong oxidizers.
Hazardous Decomposition Products	Thermal decomposition products may include toxic and corrosive fumes of ammonia, and toxic oxides of nitrogen and sulphur. NOTE:

	Chlorination of sulphamic acid with acidic ammonium chloride solutions gives the powerfully explosive oil, nitrogen trichloride. Heating mixtures of barium, potassium, sodium amidosulphates or sulphamic acid, with sodium or potassium nitrates or nitrites, leads to reactions which may be explosive. Mixing sulphamic acid with fuming nitric acid results in violent release of nitrous oxide.

Section 11. Toxicological Information

Component Toxicity	**LD50 Oral**	**LD50 Dermal**	**LC50 Inhalation**
Sulphamic Acid	1.45g/kg (Rat)		

Likely Routes of Exposure	
Skin:	May cause redness and, blistering of skin, can lead to dermatitis.
Eyes:	May cause permanent damage to the eyes. Symptoms may include: irritation, burning, pain, watering and/or change of vision.
Inhalation:	Symptoms of exposure may include: nasal discharge, hoarseness, coughing, chest pain and breathing difficulty, general irritation of the respiratory tract. Accumulation of fluid in the lungs may occur (pulmonary oedema).
Ingestion:	May cause gastrointestinal irritation, nausea, vomiting, and diarrhoea. May cause liver and kidney damage.
Acute Toxicity Estimates (ATE)	Oral (Rat): 3.16 g/kg
STOT (Specific Target Organ Toxicity) – Single Exposure	Not classified
Aspiration Toxicity	Not classified
STOT (Specific Target Organ Toxicity) – Repeated Exposure	Not classified
Skin Corrosion / Irritation	Mild irritant
Serious Eye Damage / Irritation	Moderate irritant
Respiratory or Skin Sensitization	Not classified
Carcinogenicity	Not listed.
Reproductive Toxicity	
- **Sexual Function and Fertility**	Not classified
- **Development of Offspring**	Not classified

- **Effects on or via Lactation**	Not classified
Germ Cell Mutagenicity	Not classified
Interactive Effects	Not classified
Other Information	None known

Section 12. Ecological Information	
Ecotoxicity	LC50: 14.2 mg/L (Pimephales promelas) 96 hr
Persistence and Degradability	Will not persist
Bioacumulative Potential	No data
Biodegradability	No data
Mobility in Soil	Not available
Other Adverse Effects	None known

Section 13. Disposal Considerations	
Disposal Considerations	Dispose of contents/container in accordance with local regulations.

Section 14. Transport Information	
UN Number	2967
UN Proper Shipping Name	Sulphamic Acid
Transport Hazard Class(es)	8
Packaging Group	III
Environmental Hazards	Not applicable
Bulk Transport	Not applicable
Special Precaution	Not applicable
DOT Erg#	154

Section 15. Regulatory Information	
Canada – DSL Inventory	All components of this product are either on the Domestic Substances List (DSL), Non-Domestic Substances List (NDSL), or exempt
TSCA	All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt
Additional Information	None

Section 16. Other Information

NFPA Rating	Health-2/ Flammability-0/Reactivity-2/Special Hazard-Not applicable
HMIS Rating	Health-2/Flammability-0/Reactivity-2/Personal Protection-See Section 8.
Prepared by:	Chemfax Products Ltd., Technical Department
Date Prepared:	28 September , 2012
Date of Latest Revision: 25 January 2021	

Disclaimer

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